

REMARKS

Reconsideration and allowance of the above-identified application are respectfully requested. Claims 1-8 are pending. Claims 1 and 3 have been amended.

Applicants' representative would like to thank Examiner Giesy and his supervisor for their time and courtesy during the personal interview conducted on July 7, 2005. As discussed in the interview, claim 1 has been amended to clarify the meaning of the claim, however the scope of claim 1 has not changed.

In response to the objected to figure 10 of the drawings, Applicants are submitting a replacement sheet labeling figure 10 as prior art.

The Office Action has rejected claims 1-4 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,408,454 to Hasegawa ("Hasegawa"). This rejection is respectfully traversed.

Prior to addressing the rejection in detail, a brief description of an exemplary embodiment of the disclosed invention is presented to highlight the advantageous characteristics thereof. The present invention relates to a track jump control apparatus and track jump method. As illustrated in fig. 4, a track jump pulse is applied to the tracking actuator, and then acceleration pulses are applied if the tracking actuator is determined to be moving too slowly, and

deceleration pulses are applied if the tracking actuator is determined to be moving too fast. This determination is based the zero-crossings of a tracking error signal TE. The movement of the tracking actuator is then stopped by the braking pulse. As shown in Fig. 5, if it is determined that the tracking actuator is taking considerably longer than the time desired to move between track, an acceleration pulse, which is larger than the first acceleration pulse, is applied.

Hasegawa does not anticipate Applicants' claim 1 because Hasegawa does not disclose "a first acceleration pulse applied with a suitable timing, and a second acceleration pulse larger than the first acceleration pulse when it is determined by the comparator that said predetermined threshold value is exceeded," as recited in Applicants' claim 1.

Hasegawa discloses a track jumping controlling apparatus in which, for each track jump, a single jump pulse (kick pulse) and a single brake pulse is generated. In a first embodiment disclosed by Hasegawa illustrated by fig. 2, the pulse widths of the kick pulse TK and the brake pulse TB are adjusted so that the sum of the two pulses are equal the required track jump time TJ (Col. 5, lines 45-59). As can be seen in fig. 2, the peak values of the kick pulse and brake pulse are held constant. In the second embodiment disclosed by Hasegawa, as illustrated in fig. 6, The pulse width of the kick pulse TK is varied, and instead of varying the pulse width of the of the brake pulse, the peak value IB of the brake pulse is adjusted in order to get the correct jump time TJ. (Col. 8, line 65 – Col. 9,

line 26). Hasegawa does not mention outputting two acceleration pulses of different levels during a track jump. Therefore, Hasegawa cannot disclose “a first acceleration pulse applied with a suitable timing, and a second acceleration pulse larger than the first acceleration pulse when it is determined by the comparator that said predetermined threshold value is exceeded,” as recited in Applicants’ claim 1.

Claims 2, 7 and 8 depend from claim 1. Accordingly, for at least those reasons discussed above with respect to claim 1, it is respectfully submitted that Hasegawa does not anticipate Applicants’ claims 2, 7, and 8.

Similar to claim 1, claim 3 recites “applying a second acceleration pulse larger than said first acceleration pulse when said zero-cross cycle exceeds predetermined threshold value.” Accordingly, for at least those reasons with respect to claim 1, it is respectfully submitted that Hasegawa does not anticipate Applicants’ claim 3.

Claim 4 depends from claim 3. Accordingly, for at least those reasons discussed above with respect to claims 3, it is respectfully submitted that Hasegawa does not anticipate Applicants’ claim 4.

Claim 5 recites all the elements of claim 1, along with additional limitations not disclosed by Hasegawa. For example, Hasegawa does not disclose that a “level detector detects the level of the tracking error signal with a predetermined period shorter than a target value of the zero-cross cycle at a time

that the application of said brake pulse has ended,” and the outputting of “a third acceleration pulse when said level does not fall below a predetermined value,” as recited in claim 5. Accordingly, for at least these reasons, it is respectfully submitted that Hasegawa does not anticipate Applicants’ claim

Claim 6 recites all the elements of claim 3, along with additional limitations not disclosed by Hasegawa. For example, Hasegawa does not disclose “applying a brake pulse ... a predetermined number of tracks before said target track,” “detecting a level of the tracking error signal with a predetermined period shorter than a target value of the zero-cross cycle” and “applying a third acceleration pulse ... when said level does not fall below a predetermined level,” as recited in claim 6. Therefore, Hasegawa cannot anticipate Applicants’ claim 6.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

Serial No. 10/090,744»
Amendment Dated: July 19, 2005
Reply to Office Action: May 3, 2005

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #010524.51007).

Respectfully submitted,

Date: July 19, 2005


Jeffrey D. Sanok
Registration No. 32,169
Vincent J. Sunderdick
Registration No. 29,004

CROWELL & MORING LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844
JDS/AJH:lbd

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